

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP02/12708

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ A61K39/395, A61P35/00, 43/00, C07K16/18, C12P21/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ A61K39/395, A61P35/00, 43/00, C07K16/18, C12P21/08

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Toroku Jitsuyo Shinan Koho	1994-2003
Kokai Jitsuyo Shinan Koho	1971-2003	Jitsuyo Shinan Toroku Koho	1996-2003

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

CAPLUS (STN), BIOSIS (STN), REGISTRY (STN), EMBASE (STN), MEDLINE (STN)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	SUN, D. et al., Drug inhibition of Gly-Sar uptake and hPepT1 localization using hPepT1-GFP fusion protein, AAPS PharmaSci[online], 11 January, 2001 (11.01.01), Vol.3, No.1, E2, full text Retrieved from the Internet: <URL:http://www.aapsparmsci.org/view.asp?path=ps0301&ps030102&ps030102.xml&pdf=yes>	9-11,13,14 1-7
X A	SAI, Yoshimichi et al., Immunolocalization and pharmacological relevance of oligopeptide transporter PepT1 in intestinal absorption of β -lactam antibiotics, FEBS Letters, 1996, Vol.392, No.1, pages 25 to 29, full text	9-11,13,14 1-7

☒ Further documents are listed in the continuation of Box C.☐ See patent family annex.

A Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
E earlier document but published on or after the international filing date	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
O document referring to an oral disclosure, use, exhibition or other means	*Z* document member of the same patent family
P document published prior to the international filing date but later than the priority date claimed	
Date of the actual completion of the international search 20 February, 2003 (20.02.03)	Date of mailing of the international search report 11 March, 2003 (11.03.03)
Name and mailing address of the ISA/ Japanese Patent Office	Authorized officer
Facsimile No.	Telephone No.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	MRSNY, Randall J. et al., Oligopeptide transporters as putative therapeutic targets for cancer cells, Pharmaceutical Research, 1998, Vol.15, No.6, pages 816 to 818, full text	1-7,9-14
A	GONZALEZ, Deborah E. et al., An oligopeptide transporter is expressed at high levels in the pancreatic carcinoma cell lines AsPc-1 and Capan-2, CANCER RESEARCH, 1998, Vol.58, No.3, pages 519 to 525, full text	1-7,9-14

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Box I Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

- 1.
- ☒
- Claims Nos.: 8

because they relate to subject matter not required to be searched by this Authority, namely:

Claim 8 pertains to methods for treatment of the human body by therapy and thus relates to a subject matter which this International Searching Authority is not required, under the provisions of Article 17(2)(a)(i) of the PCT and Rule 39.1(iv) of the Regulations under the PCT, to search.

- 2.
- ☐
- Claims Nos.:

because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

- 3.
- ☐
- Claims Nos.:

because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

It is recognized that the matter common to the inventions as set forth in claims 1 to 7 of the present application and the inventions as set forth in claims 9 to 14 resides in "an antibody binding to PepT". However, such an antibody had been publicly known as reported in the following document. Thus, this constitution cannot be regarded as a novel matter. Therefore, it cannot be considered as the major part of the invention.

Also, it cannot be recognized that these groups of inventions have a common technical problem which had remained unsolved until the application.

Such being the case, the inventions as set forth in claims 9 to 14 and the inventions as set forth in claims 1 to 7 (continued to extra sheet)

- 1.
- ☐
- As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

- 2.
- ☒
- As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

- 3.
- ☐
- As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

- 4.
- ☐
- No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest ☐ The additional search fees were accompanied by the applicant's protest.☐ No protest accompanied the payment of additional search fees.

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Continuation of Box No.II of continuation of first sheet(1)

of the present case are not considered as relating to a group of inventions so linked as to form a single general inventive concept.